

IN THE CLAIMS

1. (Currently Amended) A method of reporting reception states of both first information received on a first traffic channel and second information received on a second traffic channel in one frame from a base station in a mobile station via a reverse frame, comprising the steps of:

allocating each of first reception state bits to each slot of a first half of the reverse frame, respectively, the first reception state a plurality of multiplexed bits indicating a reception state of the received first information information; and

allocating each of second reception state bits to each slot of a second half of the reverse frame, respectively, the second reception state a plurality of multiplexed bits indicating a reception state of the received second information to one of sixteen slots of a reverse frame via a multiplexer, wherein each slot comprises a single bit; and

transmitting the reverse frame having both the first reception state bits and the second reception state bits to the base station;

wherein each bit of at least one of the first reception state bits and the second reception state bits is identical to each other within a single reverse frame; and

wherein the first reception state bits and the second reception state bits indicate reception state indicating bits of the first and the second information are reception results result of the received first information and the received second information indicator bits for power control on a per frame basis.

2. (Currently Amended) The method of claim 1, wherein the first reception state bits and the second reception state bits plurality of multiplexed reception state indicating bits of the first and second information are alternately alternatively allocated in slots of the reverse frame.

3. (Original) The method of claim 1, wherein the reverse frame is a pilot channel frame.

4. (Currently Amended) The method of claim 1, wherein each of the plurality of multiplexed the first reception state bits and the second reception state indicating bits comprises of the first and second information comprise at least one of a Quality Indicator Bit (QIB) and an Erasure Indicator Bit (EIB).

5. (Currently Amended) The method of claim 1, wherein the first reception state bits and the second plurality of multiplexed reception state-indicating bits of the first and second information are transmitted at a 50 bps data rate.

6. (Currently Amended) A method of controlling transmission power of traffic channels in a base station, which transmits a first information on a first traffic channel and a second information on a second traffic channel ~~in one frame to a mobile station, wherein a reception result of the first and the second information is received from the mobile station, comprising the steps of:~~

receiving, from the mobile station, a reverse frame comprising first reception state bits, each allocated to a respective slot of a first half of the reverse frame, and second reception state bits, each allocated to a respective slot of a second half of the reverse frame, indicating a reception state of the first information and the second information, respectively; ~~a plurality of multiplexed reception state-indicating bits of the first information and a plurality of multiplexed reception state-indicating bits of the second information, wherein the reverse frame comprises sixteen slots and each slot comprises a single bit;~~

separating the first reception state bits and the second reception state-indicating bits from the reverse frame according to the first and the second information; and

performing a power control on the first and the second traffic channels according to the first and the second information;

wherein each bit of at least one of the first reception state bits and the second reception state bits is identical to each other within a single reverse frame; and

wherein the first reception state bits and the second reception state bits indicate the reception state-indicating bits of the first and the second information are reception results ~~result of the first information and the second information indicator bits for power control on a per frame basis.~~

7. (Currently Amended) The method of claim 6, wherein the first reception state bits and the second reception state bits ~~plurality of multiplexed reception state-indicating bits of the first and second information are~~ alternately-alternatively allocated in slots of the reverse frame.

8. (Original) The method of claim 6, wherein the reverse frame is a pilot channel frame.

9. (Currently Amended) The method of claim 6, wherein each of the ~~plurality of~~ multiplexed first reception state bits and the second reception state indicating bits ~~comprises of~~ the first and second information comprises at least one of a Quality Indicator Bit (QIB) and an Erasure Indicator Bit (EIB).

10. (Currently Amended) The method of claim 6, wherein the first reception state bits and the second ~~plurality of multiplexed reception state indicating bits of the first and second~~ information are transmitted at a 50 bps data rate.

11. (Currently Amended) A mobile station for receiving first information on a first traffic channel and second information on a second traffic channel ~~in one frame~~ from a base station and reporting reception results of the received first information and the received second information to the base station, comprising:

a first multiplexer (MUX) for multiplexing first reception state bits indicating a reception state of the received first information and second reception state bits indicating a reception state of the received second information ~~bits of the first and the second information~~; and

a second MUX for sequentially allocating each of the multiplexed first reception state bits to each slot of a first half of the reverse frame, respectively, and each of the multiplexed second reception state bits to each slot of a second half of the reverse frame, respectively; ~~the reception state indicating bits of the first and the second information in slots of a reverse frame, wherein the reverse frame comprises sixteen slots and each slot comprises a single reception state indicating bit.~~

wherein each bit of at least one of the first reception state bits and the second reception state bits is identical to each other within a single reverse frame; and

wherein the first reception state bits and the second reception state bits indicate the reception results of the received first information and the received second information for power control on a per frame basis.

12. (Currently Amended) The mobile station of claim 11, wherein the first MUX allocates a first predetermined number of successive reception state-indicating bits of the first information, each bit being allocated to a successive leading slot, and a second predetermined number of successive reception state-indicating bits of the second information, each bit being allocated to a successive trailing slot, the trailing slots following the leading slots for the first information.

13. (Cancelled)

14. (Original) The mobile station of claim 11, wherein the reverse frame is a pilot channel frame.

15. (Currently Amended) The mobile station of claim 11, wherein each of the reception state-indicating bits of the first information and the second information comprises at least one of a Quality Indicator Bit (QIB) and an Erasure Indicator Bit (EIB).

16. (Currently Amended) The mobile station of claim 11, wherein the first reception state bits and the second reception state-indicating bits of the first information and the reception state-indicating bits of the second information are transmitted at a 50 bps data rate.

17. (Currently Amended) A base station for transmitting first information on a first traffic channel and second information on a second traffic channel ~~in one frame~~ to a mobile station and receiving the reception results of the first and the second information from the mobile station, comprising:

a first demultiplexer (DEMUX) for receiving a reverse frame comprising both multiplexed first reception state bits, each allocated to a respective slot of a first half of the reverse frame, and multiplexed second reception state bits, each allocated to a respective slot of a second half of the reverse frame, sixteen slots and for separating the multiplexed first reception state bits and the multiplexed second reception state-indicating bits of the first information and the second information multiplexed by the mobile station from the reverse frame; frame, wherein each slot comprises a single reception state-indicating bit; and

a second DEMUX for demultiplexing the multiplexed first reception state bits and the multiplexed second reception state-indicating bits into the first reception state-indicating bits of the first information and the second reception state-indicating bits of the second information; information.

wherein each bit of at least one of the first reception state bits and the second reception state bits is identical to each other within a single reverse frame; and

wherein the first reception state bits and the second reception state bits indicate the reception results of the first information and the second information for power control on a per frame basis.

18. (Currently Amended) The base station of claim 17, wherein the multiplexed first reception state-indicating bits of the first information are arranged in consecutive leading slots of the reverse frame and the multiplexed second reception state-indicating bits of the second information are arranged in trailing consecutive slots following the leading slots.

19. (Cancelled)

20. (Original) The base station of claim 17, wherein the reverse frame is a pilot channel frame.

21. (Currently Amended) The mobile station of claim 17, wherein each of the reception state-indicating bits of the first information and the second information comprises at least one of a Quality Indicator Bit (QIB) and an Erasure Indicator Bit (EIB).

22. (Currently Amended) The mobile station of claim 17, wherein the first reception state and the second reception state-indicating bits of the first information and the reception state-indicating bits of the second information are transmitted at a 50 bps data rate.